

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No.: 50169/102/ENPO

In re patent application of

Wallace T.Y. TANG

Serial No.: 07/996,817

Group Art Unit: 2607

Filed: December 28, 1992

Examiner: H. Pham

For: IN-SITU REAL-TIME MONITORING TECHNIQUE AND  
APPARATUS FOR ENDPOINT DETECTION OF THIN FILMS  
DURING CHEMICAL/MECHANICAL POLISHING PLANARIZATION

ASSOCIATE POWER OF ATTORNEY

The Honorable Commissioner of  
Patents and Trademarks  
Washington, D.C. 20231

Sir:

The undersigned attorney of record hereby grants the following attorney(s)/agent(s) an associate power to prosecute the above-identified application and transact all business in the Patent and Trademark Office connected therewith:

Arthur Schwartz, Registration No. 22,115;  
Donald D. Jeffery, Registration No.  
19,980; Richard L. Schwaab, Registration  
No. 25,479; Peter G. Mack, Registration  
No. 26,001; David A. Blumenthal,  
Registration No. 26,257; John J. Feldhaus,  
Registration No. 28,822; Stephen A. Bent,  
Registration No. 29,768; Bernhard D. Saxe,  
Registration No. 28,665; Brian J.  
McNamara, Registration No. 32,789 and  
Colin G. Sandercock, Registration No.  
31,298.

It is requested that all correspondence be sent to:

FOLEY & LARDNER  
3000 K Street, N.W., Suite 500  
Washington, D.C. 20007-5109

Address telephone communications to Harold C. Wegner at  
(202) 672-5300.

Respectfully submitted,

November 23, 1994  
Date

FOLEY & LARDNER  
Suite 500  
3000 K Street, N.W.  
Washington, DC 20007-5109  
(202) 672-5300

Stephen B. Maebius  
Stephen B. Maebius  
Registration No. 35,264

864780" 24THE60

free

UTILITY PATENT  
OR DESIGN  
SOLE OR JOINT

**WEGNER, CANTOR, MUELLER & PLAYER**  
UNITED STATES LETTERS PATENT  
DECLARATION AND POWER OF ATTORNEY

ATTORNEY'S DOCKET NO  
**P-2921-23619**

As a below named inventor, I declare that I believe I am the original, first and sole inventor if only one name is listed at item 201 below, or a joint inventor if plural names are listed below at items 201 et. seq. of subject matter which is claimed and for which a patent is sought for

the invention entitled: **IN-SITU REAL-TIME MONITORING TECHNIQUE AND APPARATUS FOR ENDOPOINT DETECTION OF THIN FILMS DURING CHEMICAL/MECHANICAL** which is described and claimed in:  
☐ the attached specification ☒ the specification in application Serial No. **07/996,817** filed **December 28, 1992**  
(for declaration not accompanying application papers)

and (if applicable) amended on ..... filed ..... and as amended on ..... (if any)  
☐ international (PCT) application No. .... filed .....  
I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, §1.56. I hereby claim the benefit of priority, under Title 35, United States Code, §119, of any foreign application(s) for patent or inventors certificate having a filing date before that of the application for which priority is claimed.

I hereby claim the benefit, under Title 35, United States Code, §120, of any U.S. application(s) listed in item 105 below. If this application is a continuation-in-part, insofar as the subject matter of any of the claims thereof is not disclosed in the prior U.S. application(s) identified in item 105 below in the manner provided by the first paragraph of Title 35, United States Code, §112. I acknowledge the duty to disclose all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, §1.56 which became available between the filing date of the prior U.S. application(s) identified in item 105 below and the national or PCT international filing date of this application.

FOREIGN APPLICATION(S), IF ANY, FILED WITHIN 12 (6 if a Design) MONTHS PRIOR TO THE FILING DATE OF THIS APPLICATION THE PRIORITY OF WHICH WHERE PERMITTED IS HEREBY CLAIMED UNDER 35 U.S.C. §119

100	COUNTRY	APPLICATION NUMBER	DATE OF FILING (day, month, year)	PRIORITY CLAIMED	
				YES	NO
100					

THIS APPLICATION IS A:

☐ CONTINUATION  
☐ DIVISION

☐ CONTINUATION-IN-PART  
OF PRIOR U.S. APPLICATION

SERIAL NO.

FILED

**POWER OF ATTORNEY:** As a named inventor, I hereby appoint the following attorney(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

**HAROLD C. WEGNER**  
Registration No. 25,258

**HERBERT I. CANTOR**  
Registration No. 24,392

**HELMUTH A. WEGNER**  
Registration No. 17,033

**FRANKLIN D. WOLFFE**  
Registration No. 19,724

**DOUGLAS P. MUELLER**  
Registration No. 30,300

**WILLIAM E. PLAYER**  
Registration No. 31,409

SEND CORRESPONDENCE TO:

**WEGNER, CANTOR, MUELLER & PLAYER**  
P.O. Box 18218  
Washington, D.C. 20036-8218

DIRECT TELEPHONE CALLS TO:

202-887-0400

Inventor(s) name must include at least one unabbreviated first or middle name.

201	FULL NAME OF INVENTOR	LAST NAME <b>TANG</b>	FIRST NAME <b>Wallace</b>	MIDDLE NAME <b>T. Y.</b>
	RESIDENCE CITIZENSHIP	CITY OR OTHER LOCATION <b>Warren</b>	STATE OR COUNTRY <b>New Jersey</b>	CITIZENSHIP <b>USA</b>
	POST OFFICE ADDRESS	<b>P. O. Box 4408, 5 Deerwood Trail</b>		
202	FULL NAME OF INVENTOR	LAST NAME	FIRST NAME	MIDDLE NAME
	RESIDENCE CITIZENSHIP	CITY OR OTHER LOCATION	STATE OR COUNTRY	CITIZENSHIP
	POST OFFICE ADDRESS			
203	FULL NAME OF INVENTOR	LAST NAME	FIRST NAME	MIDDLE NAME
	RESIDENCE CITIZENSHIP	CITY OR OTHER LOCATION	STATE OR COUNTRY	CITIZENSHIP
	POST OFFICE ADDRESS			

☐ Fourth (and more) coinventors on page 2

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

SIGNATURE OF INVENTOR 201

SIGNATURE OF INVENTOR 202

SIGNATURE OF INVENTOR 203

DATE **2/23/93**

DATE

DATE

# SMALL ENTITY DECLARATION

☒ APPLICANT OR PATENTEE Wallace T. -Y. TANG

☒ SERIAL NO. 07/996,817

☐ PATENT NO. \_\_\_\_\_

ATTORNEY'S

DOCKET NO. P2921-23619

☒ FILED OR ISSUED December 28, 1992

FOR IN-SITU REAL-TIME MONITORING TECHNIQUE AND APPARATUS FOR ENDPOINT DETECTION OF THIN FILMS DURING CHEMICAL/MECHANICAL POLISHING PLANARIZATION ☐ SUBMITTED HERewith

I (we) hereby declare that I (we) am (are) entitled to the benefit of small entity status with respect to the above-identified application or patent for purposes of paying reduced fees under 35 USC 41(a) & (b) to the U.S. Patent and Trademark Office.

☒ A. INDEPENDENT INVENTOR

I (we) qualify as a(n) independent inventor(s) as defined in 37 CFR 1.9(c).

☐ B. INDIVIDUAL NON-INVENTOR

I would qualify as an independent inventor as defined in 37 CFR 1.9(c) if I had made the invention.

☐ C. SMALL BUSINESS CONCERN

I am ☐ THE OWNER ☐ AN OFFICIAL of the small business concern identified below and am empowered to act on behalf of the concern. The concern qualifies under 37 CFR 1.9(d) and 13 CFR 121.3-18. Rights under contract or law have been conveyed to and remain with the concern and are exclusive unless a checkmark is placed here ☐ and another Declaration on behalf of another entity is filed herewith.

☐ NON-PROFIT ORGANIZATION

I am an official empowered to act on behalf of the non-profit organization identified below. The organization qualifies under 37 CFR 1.9(e), sub-section: ☐ (1) ☐ (2) ☐ (3) ☐ (4). Rights under contract or law have been conveyed to and remain with the organization and are exclusive unless a checkmark is placed here ☐ and another Declaration on behalf of another entity is filed herewith.

I (we) acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b)).

I (we) hereby declare that all statements made herein of my (our) own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

Wallace T. -Y. Tang

Name of Inventor

Signature

2/23/93

Date

Name of Inventor

Signature

Date

Name of Inventor

Signature

Date

5 Deerwood Trail, Box: 4408  
Warren, NJ 07059

Address

Name of Concern or Organization

By Wallace T. -Y. Tang

Name of Person Signing

Signature

2/23/93

Title

Date